

Appendix 2-C

SUBSTITUTE TOPSOIL MATERIAL (DOWNCAST)

INTRODUCTION

No topsoil material was removed to a designated topsoil storage area from the portal access road and adjacent areas due to the prelaw nature of the disturbance. The native material available as downcast material has been designated as a substitute to be used during reclamation. In order to show that the material is suitable for reclamation as substitute topsoil material the procedures discussed below have been defined and are to be followed as described.

Tests of the same material were taken in 1984 (See [Appendix 2-A](#)) and all results indicated that the material was compatible and capable of establishing and maintaining a diverse vegetative community consistent with the reference area.

DEFINITION OF AREA

The substitute topsoil material is located at the nearest approx 20 ft of surface material 0 to 2 ft deep along the downhill side of the referenced portal access road shown on [Plate 5-2](#). A typical section of the area showing the reclamation procedure is shown in [Figure 5-4](#) and described in [R645-301-542.200](#).

PHYSICAL AND CHEMICAL PROPERTIES OF SOIL

Soil samples (PR-1 and PR-2) were taken 12 April 1989 as selected by DOGM representative Henry Sauer, along the access road. The results are included in [Appendix 2-A \(Page 2A-11 and 2A-12\)](#) and have been found suitable as plant growth material. Samples were tested following the guidelines in Table 1 from the State of Utah, Department of Natural Resources, Division of Oil Gas and Mining, Guidelines for Management of Topsoil and Overburden for Underground and Surface Coal Mining. See [Table 2-7](#).

REVEGETATION TRIAL TESTING

In order to further verify the suitability of the substitute topsoil material revegetation field testing will be performed as requested by DOGM.

1. An on-site survey will be made in the summer of 1989 by a representative of Co-Op and DOGM to determine areas that require additional seeding due to recent disturbances. Much of the area has revegetated since the original disturbance.
2. Areas that require additional seeding will be hydroseeded during the fall of 1989 using the Pinyon Juniper Grass, grass and forbs seed mix recommended in [R645-301-341, Table 3-7](#). Tack to fiber ratios, rate of application of wood fiber mulch and fertilizer will be applied as defined in [R645-301-341, Table 3-8](#). In 1990 it was determined by DOGM that areas should be reseeded. Seeding will be completed in the fall of 1990.
3. A 30 ft x 50 ft test plot area, near the Hiawatha Portal, was selected by DOGM representative Henry Sauer, in August 1989. The test plot will be marked at each corner with a metal post. Monitoring will be completed for a period of 10 years or until applicable vegetation standards are met following the procedures defined in [R645-301-341.250](#).

RECLAMATION

This material will not be disturbed until required for redistribution during reclamation except as required to maintain the immediate roadside berm. Reclamation will be followed as defined in [R645-301-240](#), [Appendix 5-F](#) and other applicable section of this plan.